

What is claimed is:

1. A portable data storage device, comprising:

5       a universal serial bus (USB) connector;

          a volatile memory for read and write and store data;

          a control chip connected between said USB connector  
10       and said volatile memory to serve as a transmission  
          interface between said portable data storage and  
          an external electronic apparatus;

          a charging battery for providing power needed by  
15       said volatile memory to store data; and

          a battery charging circuit connected between said  
          USB connector and said charging battery for charging  
          said charging battery.

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2. The portable data storage device as claimed in claim  
1, wherein said USB connector comprises a USB version  
2.0.

25   3. The portable data storage device as claimed in claim  
1, wherein said volatile memory comprises a dynamic

random access memory (DRAM).

4. The portable data storage device as claimed in claim  
1, wherein said volatile memory comprises a  
5 synchronous dynamic random access memory (SDRAM).
5. The portable data storage device as claimed in claim  
1, wherein said control chip includes a USB serial  
interface engine, a micro processing unit, a  
10 firmware unit, a program RAM, and a RAM memory module.
6. The portable data storage device as claimed in claim  
1, wherein said external electronic apparatus is  
selected from the group consisting of computer,  
15 digital camera, digital video camera, mobile phone,  
personal digital assistant, printer, and electronic  
calculator.
7. The portable data storage device as claimed in claim  
20 1, wherein said charging battery is charged using  
power from said external electronic apparatus via  
said USB connector and said charging circuit.